PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file referent AX030097WO	FOR FURTHER AC		<u> </u>			
International application No. PCT/ES2003/000490	International filing date (26.09.2003	(day/month/year) Priority date (day/month/year) 26.09.2003	ay/month/year)			
International Patent Classification (IPC) or national classification and IPC G10K9/00						
Applicant RIDER ANZADALA, Roberto						
Authority under Article	 This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 					
2. This REPORT consists	2. This REPORT consists of a total of 5 sheets, including this cover sheet.					
	ompanied by ANNEXES, comprisir					
	icant and to the International Bure					
and/or shee Administrati	The second of th					
beyond the Supplement	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.					
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).						
4. This report contains indications relating to the following Items:						
🖾 Box No. I Basis	s of the opinion					
☐ Box No. II Priori						
Box No. III Non-establishment of opinion with regard to novelty, inventive step and industria			al applicability			
	of unity of invention	the second secon	· to discolute t			
⊠ Box No. V Reas applic						
	ain documents cited					
	aln defects in the international appl					
☐ Box No. VIII Certa	Box No. VIII Certain observations on the international application					
Date of submission of the demar	nd	Date of completion of this report				
19.04.2005		03.01.2006				
Name and mailing address of the international		Authorized Officer	weher Palenten			
preliminary examining authority: ———— European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas		Swartjes, H				
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Telephone No. +31 70 340-2605	Salas only of the sales			

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/ES2003/000490

	Box	No.I	Basis of the report			
1.	With	ith regard to the language , this report is based on the international application in the language in which it ved, unless otherwise indicated under this item.				
	\boxtimes	This report is based on translations from the original language into the following language English, which is the language of a translation furnished for the purposes of:				
		□ publi	national search (under Rules 12.3 and 23.1(b)) cation of the international application (under Rule 12.4) national preliminary examination (under Rules 55.2 and/or 55.3)			
2. With regard to the elements* of the international application, this report is based on (replacer have been furnished to the receiving Office in response to an invitation under Article 14 are rereport as "originally filed" and are not annexed to this report):			to the elements* of the international application, this report is based on <i>(replacement sheets whic</i> urnished to the receiving Office in response to an invitation under Article 14 are referred to in this iginally filed" and are not annexed to this report):	:h		
	Des	cription,	Pages			
	1-6		as originally filed			
	Clai	ims, Numl	bers	I		
	1-13	3	as originally filed			
	Dra	wings, Sh	neets ~	$\bar{\mathbf{C}}$		
	1/1		as originally filed	<u>D</u>		
		a seque	as originally filed bers as originally filed neets as originally filed as originally filed ance listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing endments have resulted in the cancellation of:			
3.		The ame	endments have resulted in the cancellation of:	ź		
			lescription, pages laims, Nos.	<		
		☐ the d	Irawings, sheets/figs			
		☐ the s	equence listing (specify): eable(s) related to sequence listing (specify):			
4.	□ had Sup	I not beer	oort has been established as if (some of) the amendments annexed to this report and listed below in made, since they have been considered to go beyond the disclosure as filed, as indicated in the al Box (Rule 70.2(c)).			
			lescription, pages claims, Nos.			
		☐ the d	frawings, sheetsfligs			
		⊔ the s □ any t	sequence listing <i>(specify)</i> : table(s) related to sequence listing <i>(specify)</i> :			
	*	If ite	m 4 applies, some or all of these sheets may be marked "superseded."			

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial

1. Statement

Novelty (N)

Yes: Claims

1-13

No:

applicability; citations and explanations supporting such statement

Claims

none

Inventive step (IS)

Yes: Claims
No: Claims

1-13 none

Industrial applicability (IA)

Yes: Claims

1-13

. ,

No: Claims

none

2. Citations and explanations (Rule 70.7):

see separate sheet

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

PCT/ES2003/000490

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: ES 1 045 625 U1 D2: DE 35 46 548 A1

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to figure 2 of this document):

A horn, incorporating

- coaxial pressure (7) and acoustic (5) chambers,
- a vibrating strip (9), arranged between the chambers,
- the strip being coaxial with the acoustic chamber,
- the strip being fixed at its periphery to the free edge(3) of the partition forming the enclosing or chamber.

The subject-matter of claim differs from this known horn in that

- it incorporates a blow tube and
- the strip consists of plastic coated aluminium.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as making the membrane stronger, while still maintaining good acoustical properties.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

The use of aluminium to make stronger acoustic membranes is known per se, see e.g. document D2, abstract. The membrane of document D2, however, would lack

the air sealing properties of a prior art polymer or rubber membrane (see D1, column 2, line 20) and therefore sound worse. Therefore the skilled man would not apply the membrane of D2 to the horn of D1.

The subject-matter of claim 1 is therefore inventive (Article 33(3) PCT).

Claims 2 to 13 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.